

IN THE CLAIMS

Please amend the claims as follows:

1. (currently amended) A high voltage insulating material, comprising:
at least a first material comprising a foam material; and
at least one a second material distributed within the first material, ~~the~~the said
insulating material being contained in a casing of a high voltage device configured for
insulating components of the device;
wherein ~~the~~the said insulating material has an electrical conductivity and/or dielectric
constant which is changed by adding ~~the~~the said second material such that when ~~it~~the said
insulating material is used in the device, surface charge which gathers on the components
of the device is substantially dissipated by increased electrical conductivity of ~~the~~the said
insulating material at least such that voltage flashovers are prevented between the
components, and voltage drops that occur during operation remain below breakdown
voltages of said~~the~~ insulating material.
2. (currently amended) A high voltage insulating material as claimed in claim 1 ~~in solid~~
~~form~~, wherein ~~the~~the said second material is ~~formed by~~coats a further material comprising at
least essentially spherical particles ~~which in terms of their size and/or their material~~
~~and/or their coating and/or their filling and/or their fraction with respect to the overall~~
~~insulating material are selected and dimensioned such that a desired electrical~~
~~conductivity and/or dielectric constant of the insulating material is obtained.~~
3. (original) A high voltage insulating material as claimed in claim 2, wherein the
spherical particles are hollow spheres with a diameter of up to about 100 μm .
4. (original) A high voltage insulating material as claimed in claim 2, wherein the
spherical particles are filled with a gas.

5. (previously presented) A high voltage insulating material as claimed in claim 2, wherein the spherical particles are formed of a ceramic and/or phenolic resin and/or an acrylonitrile copolymer.

6. (currently amended) A high voltage insulating material as claimed in claim 2, comprising:

~~—— at least a first material comprising a foam material; and
—— at least one second material distributed within the first material, the insulating material being contained in a casing of a high voltage device configured for insulating components of the device;~~

~~wherein the insulating material has an electrical conductivity and/or dielectric constant which is changed by adding the second material such that when it is used in the device, surface charge which gathers on the components of the device is substantially dissipated by increased electrical conductivity of the insulating material at least such that voltage flashovers are prevented between the components, and voltage drops that occur during operation remain below breakdown voltages of the insulating material, said insulating material being in solid form, the second material being formed by at least essentially spherical particles which in terms of their size and/or their material and/or their coating and/or their filling and/or their fraction with respect to the overall insulating material are selected and dimensioned such that a desired electrical conductivity and/or dielectric constant of the insulating material is obtained, wherein the spherical particles have a coating consisting of said second material comprising an electrically conductive material.~~

7. (previously presented) A high voltage insulating material as claimed in claim 2, wherein the spherical particles have a coating consisting of a material that improves the adhesion between the particles and a basic substance.

8. (original) A high voltage insulating material as claimed in claim 2, wherein the spherical particles are embedded in a basic substance to which there is added an adhesion promoter for improving the adhesion between the particles and the basic substance.

9. (withdrawn -- currently amended) A high voltage insulating material as claimed in claim 1, wherein said first material comprises a liquid form, wherein the further said second material for changing the electrical conductivity is formed by a first substance being dissolved in said liquid basic substance.

10. (withdrawn -- currently amended) A high voltage insulating material as claimed in claim 9, wherein the basic substance is said first material comprises an insulating liquid such as a transformer oil and/or an ester liquid and the first substance is said second material comprises an aromatic and/or an alcohol.

11. (withdrawn -- currently amended) A high voltage insulating material as claimed in claim 1 in liquid form, wherein the further said first material comprises a liquid, and said second material for changing the dielectric constant is formed by added a second substance that is added to a liquid basic substance said first material and is not dissolved.

12. (withdrawn -- currently amended) A high voltage insulating material as claimed in claim 11, wherein the basic substance is an insulating liquid such as said first material comprises transformer oil and/or an ester liquid and the second substance is said second material comprises a castor oil.

13. (currently amended) A high voltage generator comprising an insulating material ~~in~~ solid form as claimed in claim 1.

14. (previously presented) A high voltage generator as claimed in claim 13, wherein the electrical conductivity and/or the dielectric constant of the insulating material is selected

such that loading with DC voltage and/or AC voltage field strengths is substantially adapted to the dielectric strength of the insulating material.

15. (previously presented) An X-ray system having a high voltage generator as claimed in claim 13.

16. (new) A high voltage insulating material as claimed in claim 1, wherein said first material comprises a foam material.

17. (new) A high voltage insulating material as claimed in claim 1, said first material with said second material distributed therein constituting a composite material having a specific resistance in the range $10^{10} \Omega\text{cm}$ to $10^{12} \Omega\text{cm}$.

18. (new) A high voltage insulating material as claimed in claim 1, in solid form, having a dielectric constant ϵ_r in the range 3 to 4.

19. (new) A high voltage insulating material as claimed in claim 1, dissipation of said charge increasing load capacity in terms of direct-current (DC) voltage field strengths.

20. (new) A method for providing a high voltage device with insulation, comprising:

distributing within a first material a second material to form a composite insulating material; and

disposing said insulating material in a casing of a high voltage device in such a manner as to insulate components of the device;

wherein said insulating material has an electrical conductivity which is changed by adding said second material such that when said insulating material is used in the device, surface charge which gathers on the components of the device is substantially dissipated by increased electrical conductivity of said insulating material at least such that voltage flashovers are prevented between the components, and voltage drops that occur during operation remain below breakdown voltages of the insulating material.